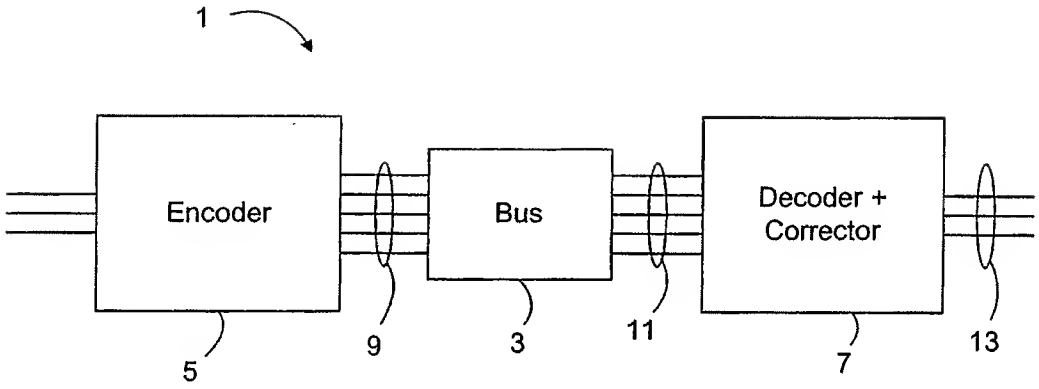


FIGURE 1
PRIOR ART

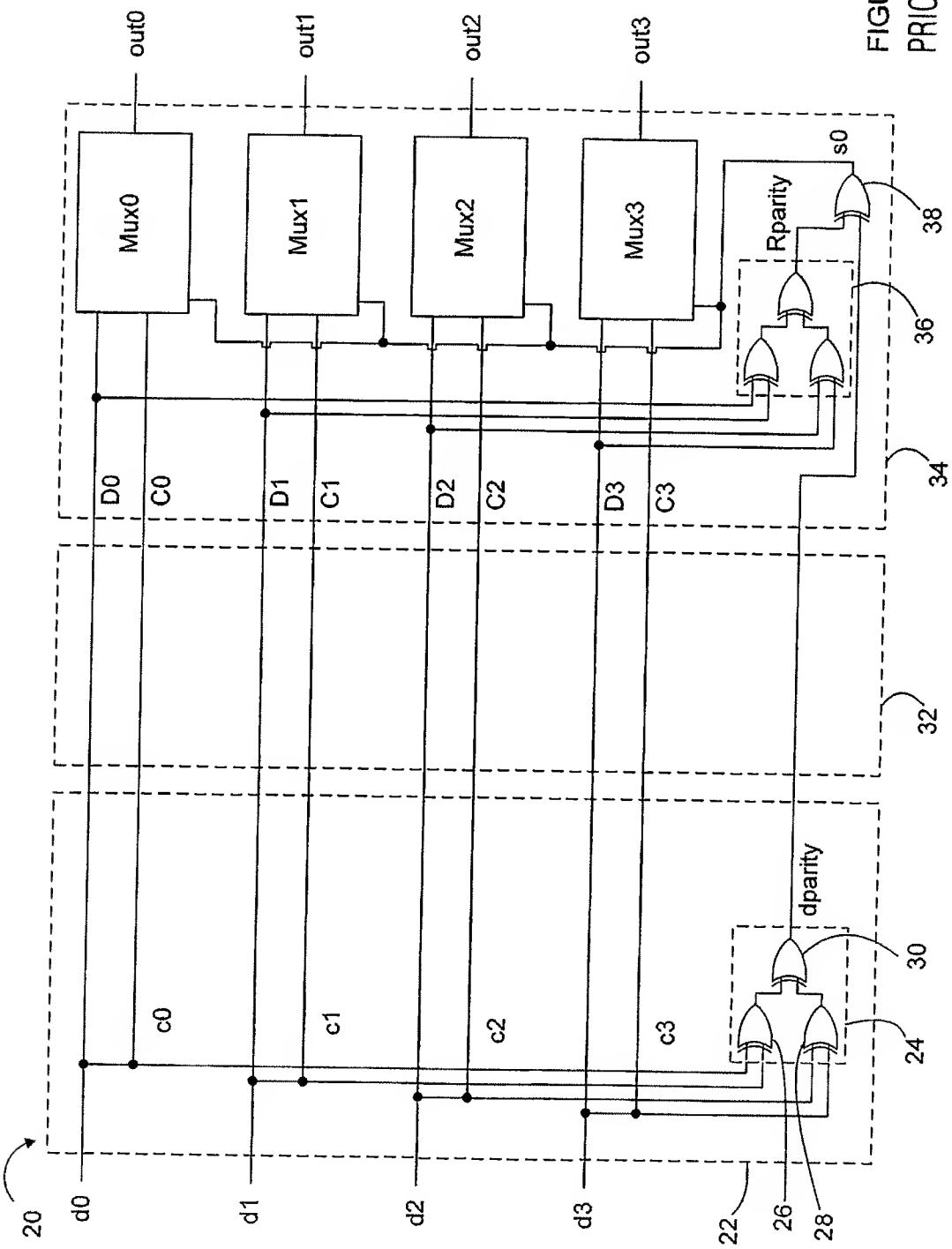


FIGURE 2
PRIOR ART

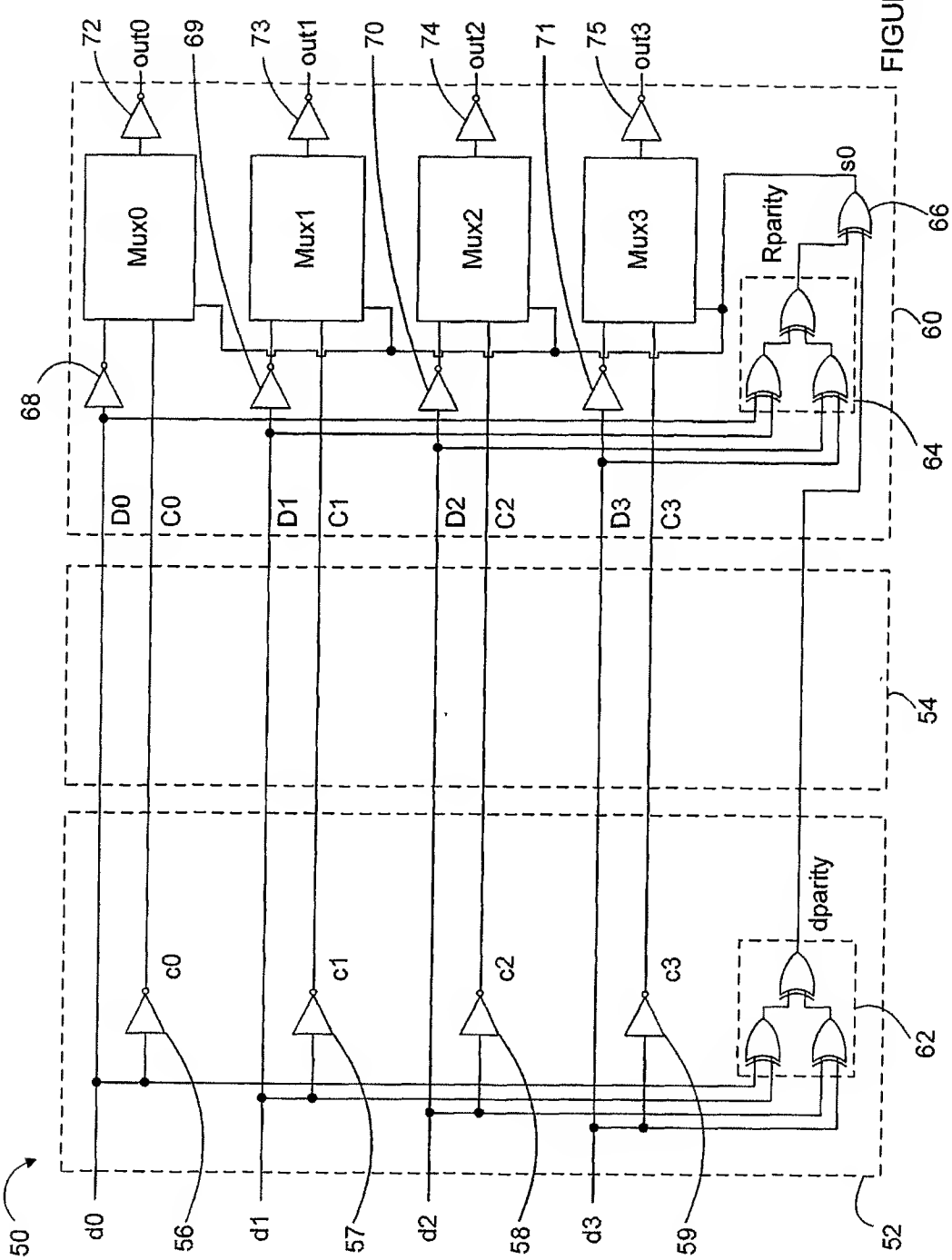
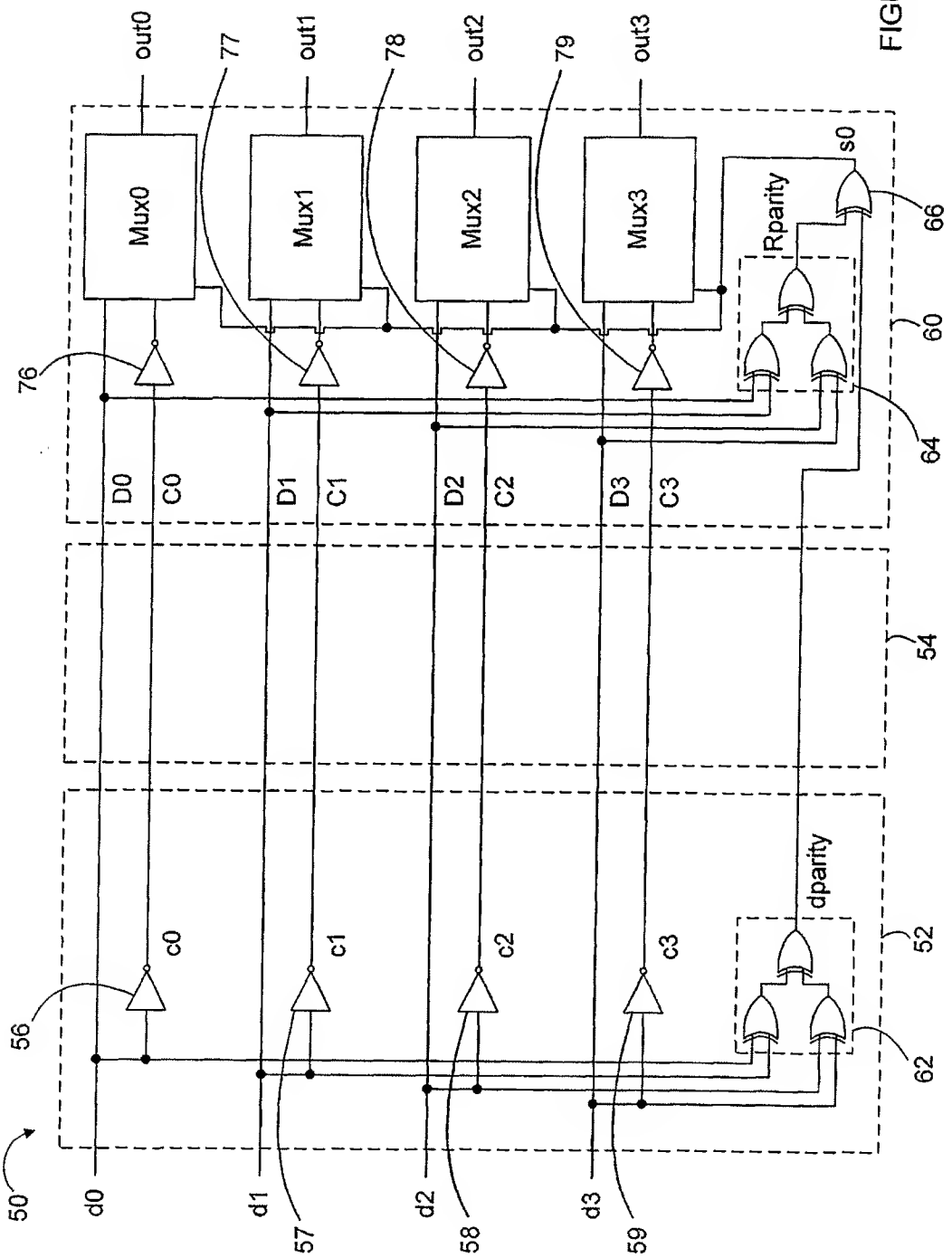
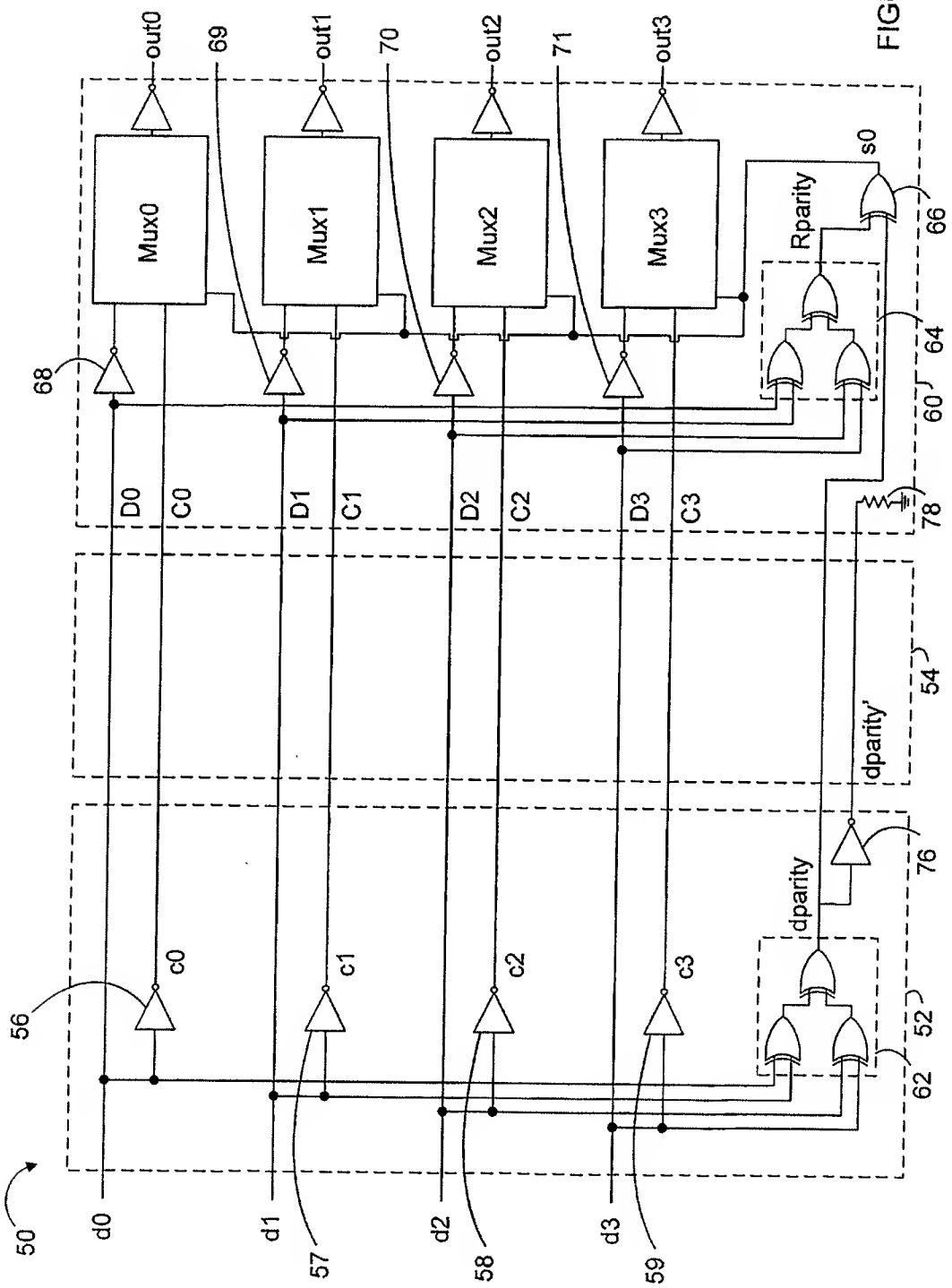

72
out0
69
73
out1
70
74
out2
71
75
out3
Mux0
Mux1
Mux2
Mux3
s0
Rparity
66
60
68
64
D0
C0
D1
C1
D2
C2
D3
C3
54
dparity
c0
c1
c2
c3
62
50
d0
56
d1
57
d2
58
d3
59
52

FIGURE 3

FIGURE 4


out0
77
out1
78
out2
79
out3
Mux0
Mux1
Mux2
Mux3
s0
Rparity
66
60
76
64
D0
C0
D1
C1
D2
C2
D3
C3
54
dparity
52
c0
c1
c2
c3
56
62
50
d0
d1
d2
d3
57
58
59


out0
69
out1
70
out2
71
out3
Mux0
Mux1
Mux2
Mux3
s0
Rparity
66
64
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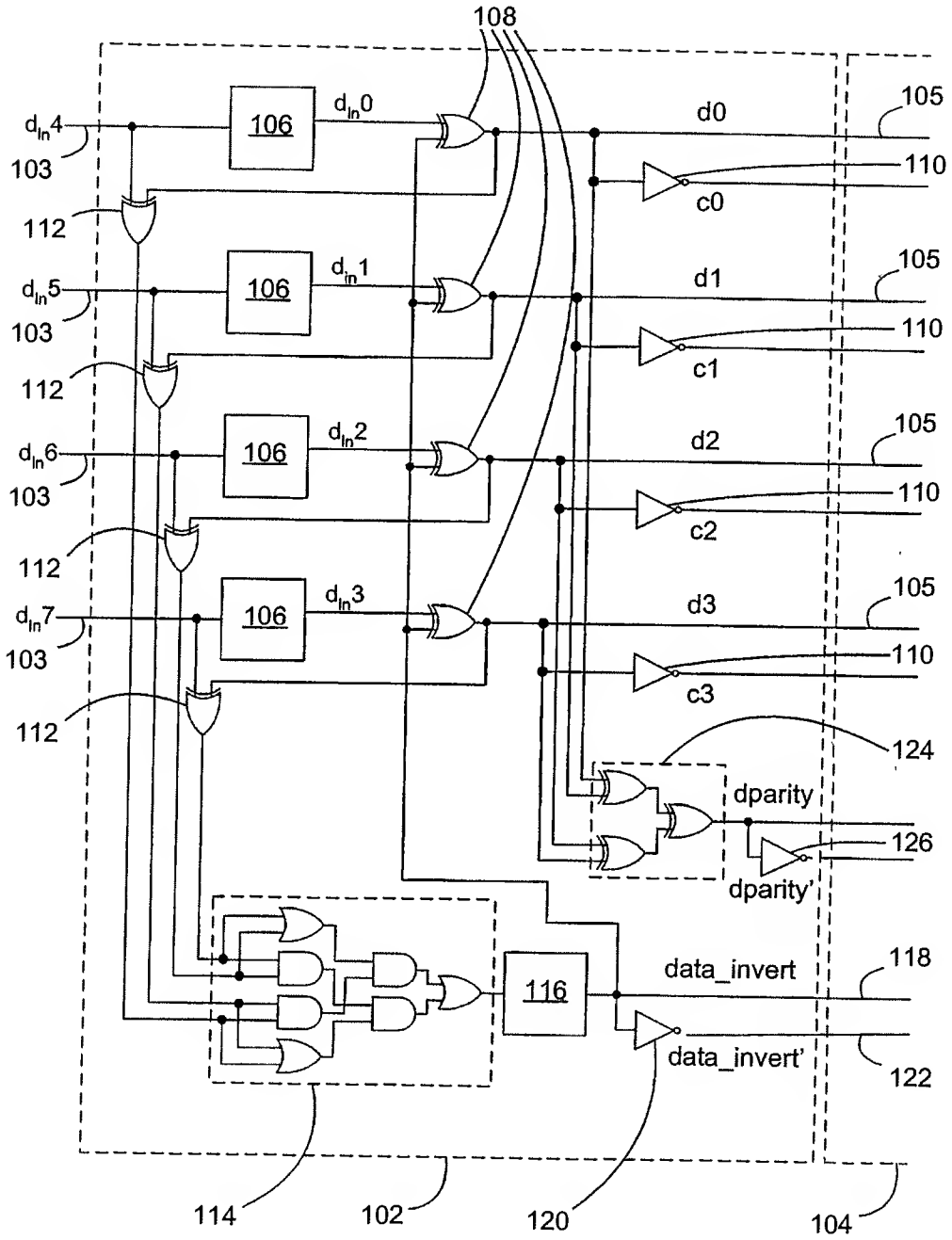
68
D0
C0
D1
C1
D2
C2
D3
C3
78
54
dparity'
76
dparity
c0
c1
c2
c3
56
52
62
50
d0
d1
d2
d3
57
58
59

FIGURE 5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106
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$d_{in}4$
103
112
$d_{in}1$
$d_{in}5$
$d_{in}2$
$d_{in}6$
$d_{in}3$
$d_{in}7$
d0
d1
d2
d3
105
110
c0
c1
c2
c3
124
dparity
126
dparity'
116
data_invert
118
data_invert'
122
114
102
120
104

FIGURE 6

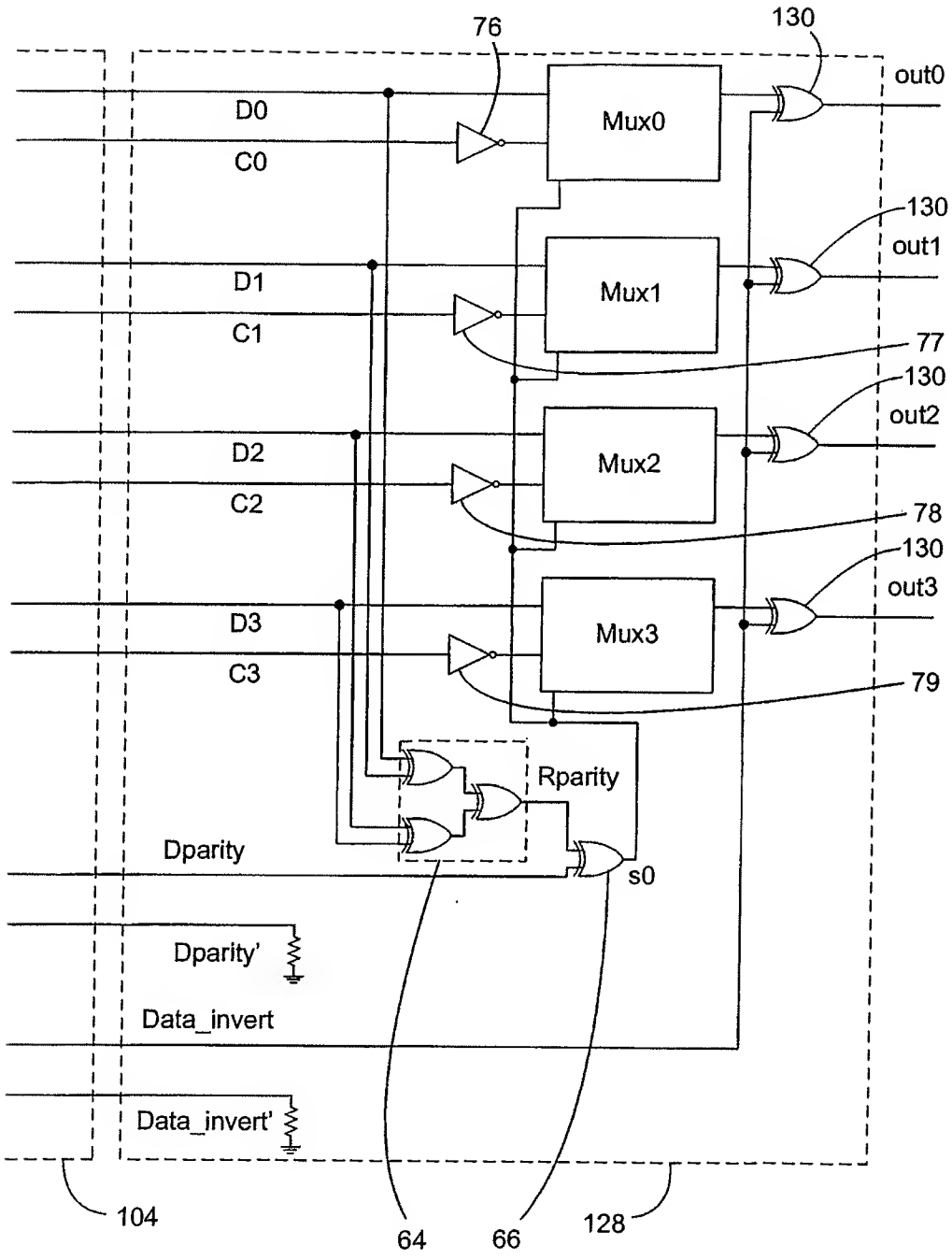
76
130
out0
D0
C0
Mux0
130
out1
D1
C1
Mux1
77
130
out2
D2
C2
Mux2
78
130
out3
D3
C3
Mux3
79
Rparity
Dparity
s0
Dparity'
Data_invert
Data_invert'
104
64
66
128

FIGURE 7

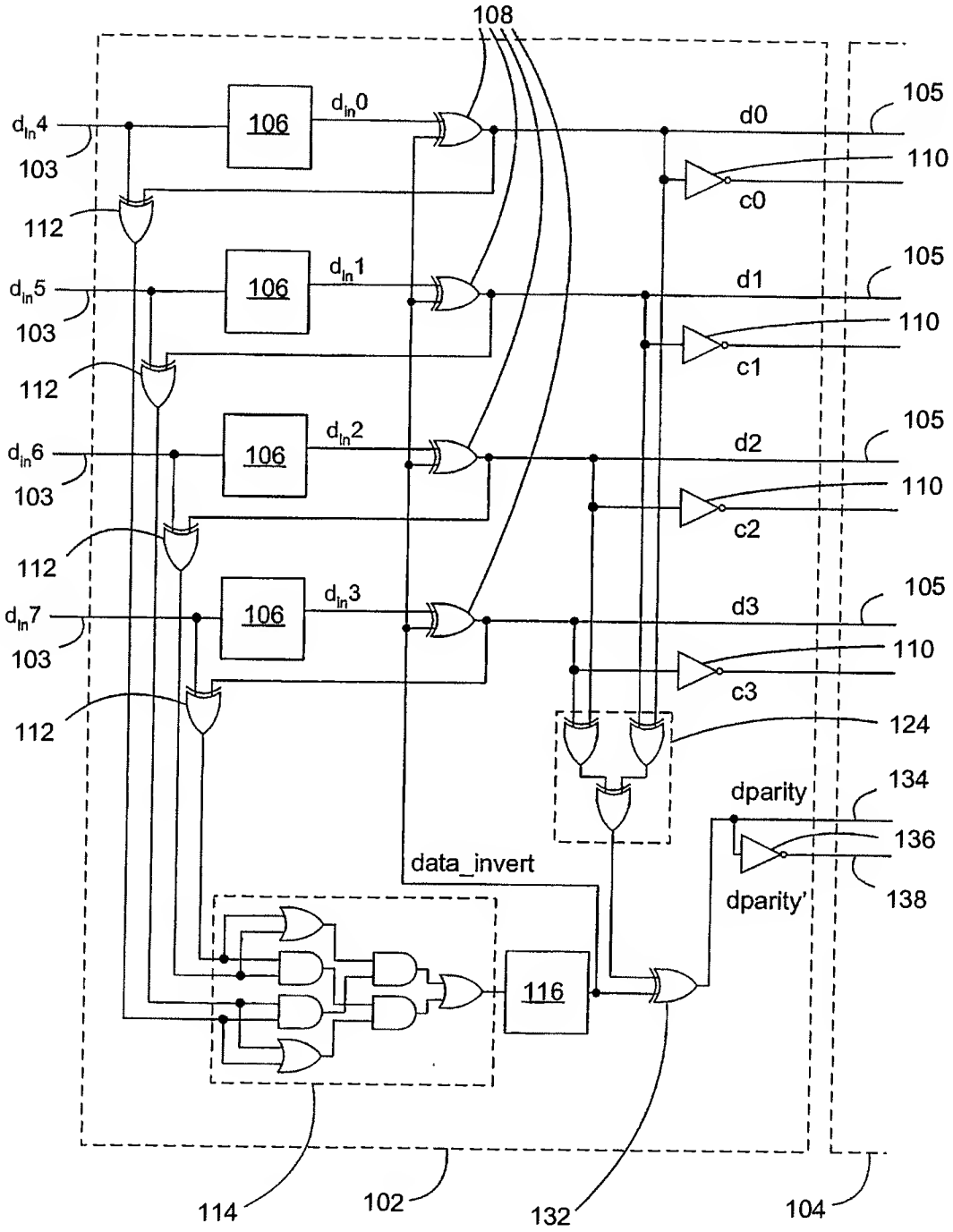
108
106
$d_{in}0$
$d_{in}4$
103
112
$d_{in}1$
$d_{in}5$
$d_{in}2$
$d_{in}6$
$d_{in}3$
$d_{in}7$
d0
d1
d2
d3
105
110
c0
c1
c2
c3
124
dparity
134
136
138
dparity'
data_invert
116
114
102
132
104

FIGURE 8

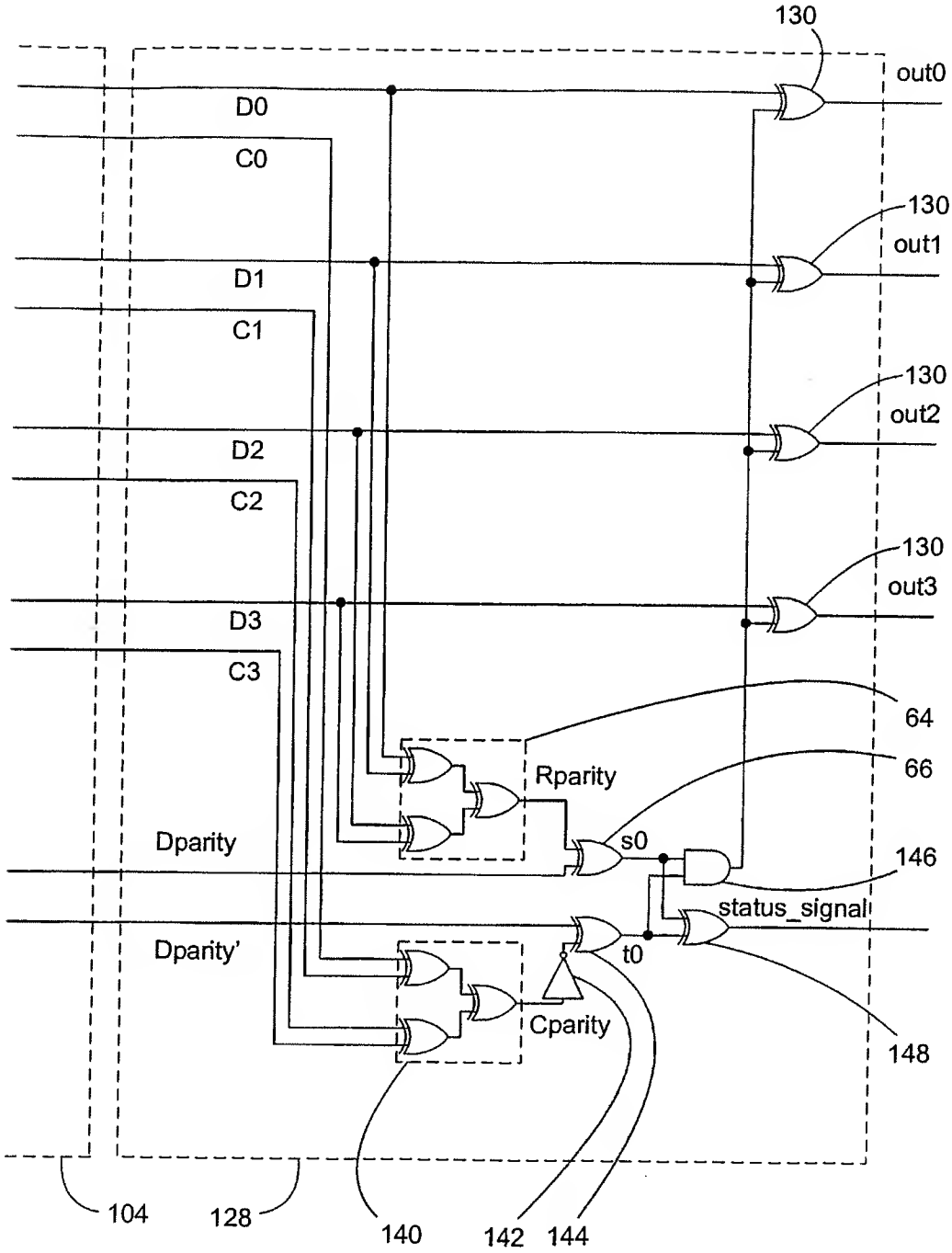
130
out0
D0
C0
130
out1
D1
C1
130
out2
D2
C2
130
out3
D3
C3
64
66
Rparity
Dparity
s0
146
status_signal
Dparity'
t0
Cparity
148
104
128
140
142
144

FIGURE 9

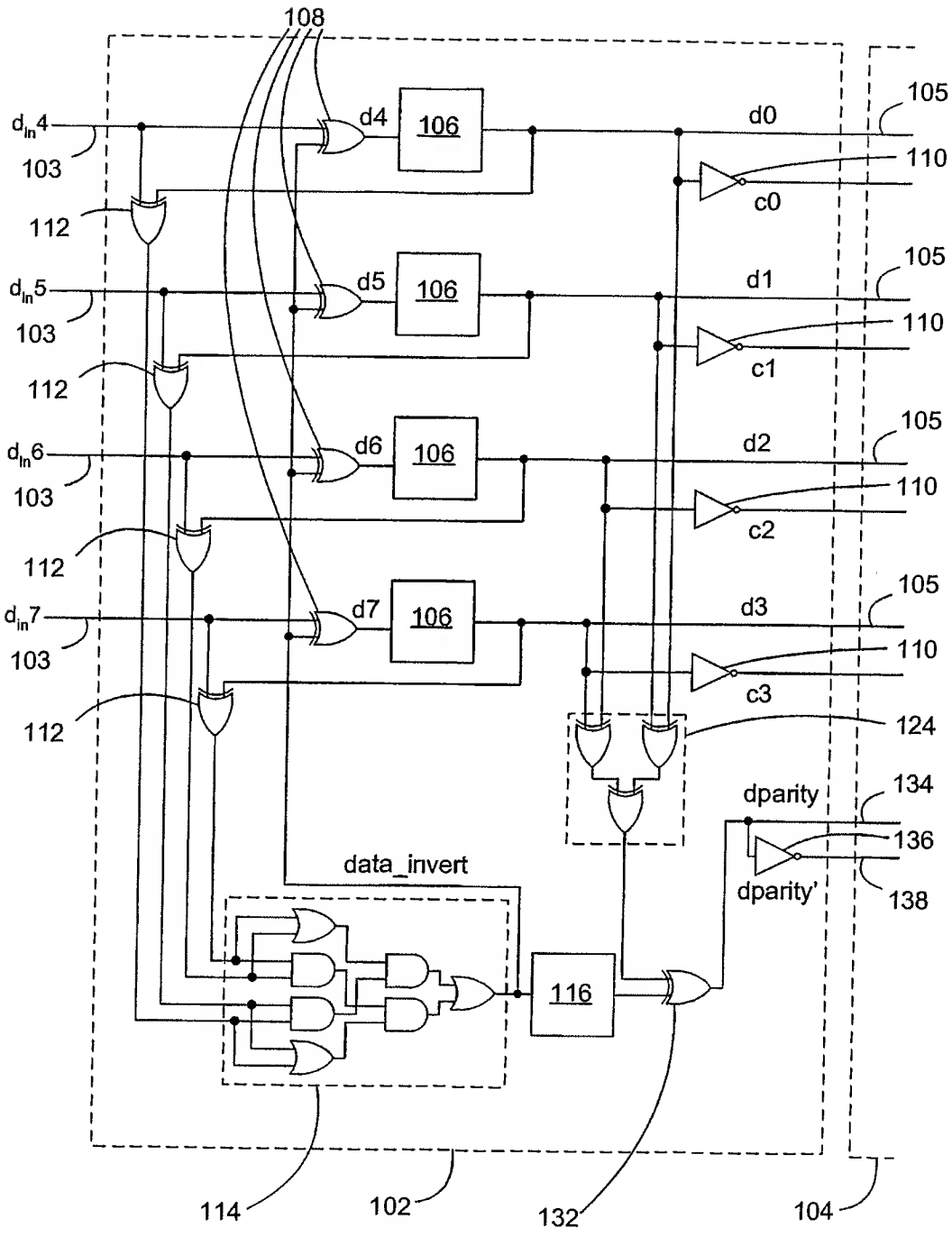
108
$d_{in}4$
103
112
d4
106
d0
105
110
c0
$d_{in}5$
103
112
d5
106
d1
105
110
c1
$d_{in}6$
103
112
d6
106
d2
105
110
c2
$d_{in}7$
103
112
d7
106
d3
105
110
c3
124
dparity
134
136
dparity'
138
data_invert
116
114
102
132
104

FIGURE 10